

Compact, connected, complete.

CytroPac – A Power Unit Revolution

Machining centers are often designed to take up as little factory floor space as possible. They require compact, energy-efficient power units that can be easily integrated into existing systems. Performance, efficiency, and connectivity are critical.

With its groundbreaking and elegant design, CytroPac from Rexroth offers an entirely new approach: CytroPac is the first compact hydraulic power unit to provide optimized hydraulic performance within such a compact, drop-in ready design. It is ready to be networked with multi-Ethernet and Industry 4.0 connectivity, and is as much as 50% smaller than traditional compact power packs, with better performance.

Demand-driven performance, fit for Industry 4.0

The robust power units are based on variable speed Sytronix drives, which offer maximum dynamics and efficiency in hydraulic systems. Optimal cooling is achieved through an extremely space-saving heat-pipe system. The integrated frequency drive serves as the sensor node which collects and transmits the data via multi-Ethernet interface (e.g. Sercos or PROFIBUS) to the machine control. This allows comprehensive condition monitoring for quick machine analysis as well as real-time operator control of flow and pressure settings. The CytroPac design also simplifies wiring effort, allowing the control cabinet to be significantly smaller—or in some cases eliminated.



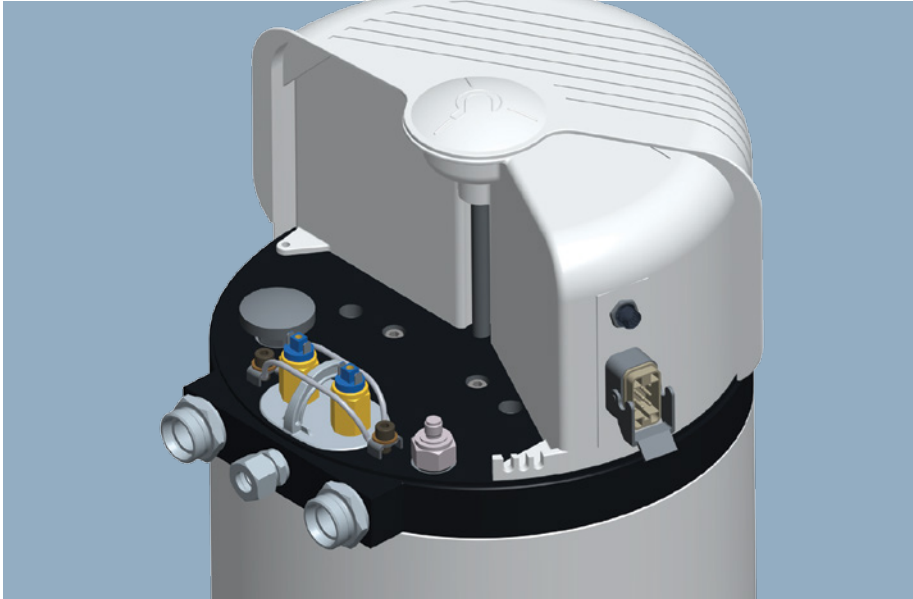
Technical Features

- ▶ Pressure up to 1450 psi (100 bar)
- ▶ Hydraulic power up to 5.4 hp (4 kW)
- ▶ Flow rate up to 9.2 gpm (34.8 lpm)
- ▶ Tank volume up to 5.3 gal (20 l)
- ▶ Built-in frequency drive with multi-Ethernet connectivity
- ▶ Integrated sensors for condition and performance monitoring
- ▶ Innovative cooling concept
- ▶ Degassing optimized reservoir

How You Benefit from CytroPac

Compact and easy to integrate

Thanks to a new technical approach, CytroPac convinces with its space-saving design, which can be easily integrated into existing systems: The tank was scaled down to reduce the oil volume and optimized to ensure the proper degassing of the oil. The innovative heat-pipe cooling system also helps to reduce the size of the power unit through the simplified, yet reliable heat exchange. Thanks to the efficient heat-pipe technology, the power unit can be cooled by means of water without extra mechanisms.



Features at a Glance

- ▶ Compact micro power unit, particularly for machine tools and assembly lines with limited installation space
- ▶ Variable-speed Sytronix pump drive for demand-driven performance
- ▶ Thanks to efficient heat-pipe technology, the power unit can be cooled by means of water
- ▶ Integrated frequency drive with multi-Ethernet connectivity (e.g. Sercos, PROFINET)
- ▶ Condition Monitoring via fluid level, temperature, pressure as well as a filter clogging sensors
- ▶ The flow is measured via the motor speed
- ▶ Integration into Industry 4.0 concepts
- ▶ Protection class IP 54

Dynamic and energy-efficient

The variable-speed Sytronix pump drive from Rexroth ensures the intelligent interaction between hydraulic and electronic components. The dynamic and demand-driven flow control improves overall system efficiency with energy savings between 30 and 80 percent!

Optimal networking capabilities and Condition Monitoring

CytroPac is equipped with level, temperature, pressure, and filter contamination sensors. The flow rate is measured via the motor speed. The frequency drive serves as the sensor node and transmits all measured data to the machine controller via multi-Ethernet interface (e.g. EtherCAT, PROFINET, EtherNet/IP, Sercos, POWERLINK). This enables comprehensive condition monitoring for the fast identification of critical machine status.

The user also has the ability to adjust the pressure and flow rate in real-time via the machine controller from virtually anywhere. The power unit will automatically implement the new settings without the need for manual intervention.

In many versions, the sensors and the motor are wired to the frequency drive, helping to simplify the commissioning process. All the user has to do is connect the communication and power supply with the control, tap into an existing hydraulic circuit, and connect to a water supply for cooling if needed. Thanks to open standards and smartly designed connection ports, CytroPac is a 100% plug and play solution for all types of machine tools and assembly lines.

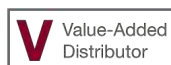
Your Benefits

- ▶ Compact, energy-efficient, and future-proof power unit up to 5.4 hp (4 KW)
- ▶ Reduces energy consumption and CO2 emissions
- ▶ New design allows the integration into all machine concepts
- ▶ Simplified wiring and reduced cabinet space requirements
- ▶ Reduced tank size due to optimized design for efficient degassing
- ▶ Low-noise operation
- ▶ Quick and early identification of critical machine status
- ▶ Short delivery times

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